

Three New Reared Braconidae (Hymenoptera)

C. F. W. MUESEBECK, United States National Museum

Names have been requested for the three new species of Braconidae described here in order that they may be available for use in papers dealing with the ecology and biology of these forms.

Orgilus indagator, new species

This form is structurally most similar to *O. cuneatus* (Provancher) but it is considerably larger, the ovipositor sheath is relatively shorter and the legs and abdomen are darker.

Female.—Length about 3.2 mm. Head a little wider than thorax, in dorsal view 1.7 times as broad as long; face very slightly wider than eye height and very finely shagreened though shiny; malar space about 0.4 as long as eye height; longest segment of maxillary palpus about as long as malar space; temples receding from eye margins, smooth and polished, and at mid-eye point about 0.75 as wide as eyes; cheeks finely shagreened; vertex weakly alutaceous; ocellocular line about twice as long as diameter of an ocellus; antennae of available specimens 30- or 31-segmented, a few of the preapical segments not distinctly longer than broad.

Mesoscutum faintly alutaceous and with extremely shallow setiferous punctures which are indistinct posteriorly and are most distinct anteriorly on the middle lobe; notauli sharply impressed, foveolate, meeting only slightly before posterior margin of mesoscutum; scutellar sulcus very large and deep and finely foveolate; propodeum closely rugulose, with prominent stubs of several carinae arising from the posterior margin and setting off five impressed areas that are open anteriorly; side of pronotum rugulose except below the impression where it is finely granulose or shagreened and mat; mesopleuron smooth and polished, the longitudinal furrow slightly curved and foveolate; metapleuron rugose posteriorly, granulose and rather mat anteriorly. Hind coxa 0.6 as long as hind femur, minutely granulose and not strongly shiny; hind femur more than four times as long as

broad; inner calcarium of hind tibia fully half as long as metatarsus; tarsal claws simple. Radial cell on wing margin hardly as long as stigma; second abscissa of radius on a line with intercubitus; stub of third abscissa of cubitus a little longer than second abscissa, which is about half as long as the recurrent vein; nervulus slightly postfurcal; lower abscissa of basella much longer than nervellus, half as long as mediella, and more than half as long as maximum width of the hind wing; radiellian cell at widest point at least as wide as cubitellian cell at narrowest.

Abdomen a little narrower than thorax; first tergite a little longer than broad at apex, closely rugulose, the dorsal keels indistinct; second tergite as long as broad at base, finely rugulose except narrowly along posterior margin where it is smooth and polished; suturiform articulation sharply impressed; third tergite sculptured like the second, though somewhat more weakly, and more broadly smooth along posterior margin; fourth tergite sometimes weakly punctate or shagreened in part; ovipositor sheath about as long as abdomen.

Black; antennal flagellum brownish yellow except on apical third where it is darkened; scape pale below, dark above; palpi pale; tegulae yellowish; wings hyaline or nearly basally, a little infumated on apical half; legs yellowish brown, the hind coxae more or less darkened; hind femora darkened apically, especially above and inwardly; hind tibiae apically and hind tarsi blackish; abdomen black, sometimes with faint reddish spots in the apical lateral angles of the first and second tergites.

Male.—Antennae of available specimens 31- to 33-segmented, with even the shortest segments much longer than broad; palpi darkened; legs more extensively darkened than in the female.

Holotype.—U. S. National Museum No. 69367.

Described from 9 females (one the holotype) and 9 males (one the allotype), all reared from larvae of *Trichotaphe levisella* Fyles at Eaglenest, MINNESOTA, in July, 1964, and August, 1965, by W. V. Balduf.

Oncophanes pusillus, new species

This is most similar to *O. americanus* (Weed) but it is smaller, and the thorax, except the anterior part of the pro-

thorax, is entirely black; in *americanus* the thorax is more or less reddish testaceous, sometimes entirely so, and the sternum, at least, is never darkened. In addition, there are differences in sculpture and in the areolation of the propodeum.

Female.—Length barely 2 mm. Head as seen from above slightly wider than thorax and less than twice as wide as long, smooth and polished; temples about three-fourths as wide as eyes; malar space a little shorter than minimum width of temple; ocelli small, the distance between the lateral ocelli about twice the diameter of one of them; ocellocular line much longer than base of ocellar triangle; antennae filiform, very slender, 21- to 23-segmented in the specimens available, the segments successively shorter but even the apical segments twice as long as broad.

Mesoscutum smooth and shining; notauli finely impressed and meeting at posterior margin of scutum; a few short longitudinal striae in the area where the notauli meet; scutum very sparsely hairy, especially on the lateral lobes, which are almost bare; scutellar sulcus deep and long, more than half as long as scutellum, a little roughened and with a median longitudinal septum; scutellum slightly convex, a little longer than broad, smooth; metanotum nearly as long as scutellum, finely rugulose; propodeum rugulose but shiny and without conspicuous hairs; areola of propodeum sharply defined, pentagonal, strongly petiolate, the petiole nearly half as long as the areola; the large basal lateral areas smooth basally; side of pronotum smooth above, foveolate in the furrow; mesopleuron smooth and shiny except for a small rugose area in the basal angle and a finely foveolate, straight longitudinal furrow below; metapleuron entirely strongly rugose. Wing venation essentially as in *americanus*, although usually mediella is a little shorter, being normally not distinctly longer than basal abscissa of basella.

Abdomen usually about as wide as thorax, and about as long; first tergite as long as broad at apex, longitudinally striate, the striae minutely punctate or granulose; the fused second and third tergites about as long as wide at widest point, finely longitudinally striate, the striae finely granular, those on the second

tergite nearly parallel, those on the third tergite somewhat finer and usually diverging more or less. Ovipositor sheath about as long as the fused second and third tergites.

Head black; antennae piceous, the scape and pedicel paler; palpi pale; thorax black except anterior part of prothorax which is testaceous; wings hyaline, stigma and veins very pale brown; legs, including all coxae, yellow; second and third tergites ranging in color from dark brown to brownish yellow; the first tergite and the apical tergites darker.

Holotype.—U. S. National Museum No. 69368.

Described from 9 females (one the holotype) reared by W. V. Balduf at Eaglenest, Minnesota, July 6, 1964, from the gelechiid *Trichotaphe levisella* Fyles. The National Museum collection also contains several specimens of both sexes (not included in the type series) that were collected in August and September, 1959, in Florence County, Wisconsin, by R. L. Giese. In the males of this series the antennae are 19- to 21-segmented.

***Bracon cuscatae*, new species**

This seems not to be closely related to any described species of *Bracon*. The combination of a smooth and polished frons, rather thin head, antennae with few and unusually long flagellar segments, longitudinally striate second and third tergites, and comparatively long ovipositor, appears to set it off as a very distinct and easily recognizable form.

Female.—Length around 2 mm. Head in dorsal view a little more than twice as broad as long, entirely smooth and polished; eyes large; temples rather strongly receding, less than half as wide as eyes; malar space about as long as pedicel of antenna; antennae 19- to 21-segmented in the available specimens, all flagellar segments at least twice as long as broad.

Thorax compact; mesoscutum smooth and polished; notauli not, or only very faintly, indicated; surface of scutum without hairs except for a very few in the lines where the notauli would be if they were present; scutellar furrow rather fine, with 8 or 10 small foveolae; scutellum nearly flat, smooth and polished; propodeum smooth and polished laterally; a well developed stub

of a median longitudinal carina arising from the posterior margin of propodeum and extending forward, sometimes nearly to the middle, and each side of this carina a little weak sculpture; pleura smooth and polished. Radius arising from slightly before middle of stigma; first abscissa of radius about as long as width of stigma and half, or nearly half, as long as second abscissa; third abscissa going almost to apex of wing and a little more than twice as long as second abscissa; section of cubitus between recurrent and first intercubitus not more than half as long as first abscissa of radius. Legs slender.

Abdomen about as long as thorax; first tergite smooth medially, finely rugulose laterally and at the posterior margin; second tergite about three times as broad as long, its posterior margin straight, most of its surface finely longitudinally striate; suturiform articulation well impressed and strongly foveolate; third tergite nearly as long as second and similarly, though more finely, striate, smooth laterally; fourth and following tergites smooth and polished, the fourth sometimes with a little indistinct sculpture; ovipositor sheath as long as abdomen and propodeum combined.

Testaceous; head black, the face often yellowish brown except for a blackish median spot; scape yellowish, pedicel and flagellum of antenna piceous to black; wings weakly infumated, stigma and veins brown; legs yellow, the hind tibiae darkened except basally and the hind tarsi with first and fifth segments dark, the intermediate ones paler.

Male.—Essentially like the female but a little smaller and more slender. Antennae of the available specimens 16- to 21-segmented.

Described from 9 females (one the holotype) and 10 males (one the allotype) reared by D. M. Anderson at Washington, D. C. from *Smicronyx* sp., apparently *S. tychiodes* LeConte, in dodder during 1964, most of them, including the holotype, in August, others in September and November; and 1 female from *Smicronyx tychiodes*, Washington, D. C., July 24, 1879. This last specimen had been labeled by Ashmead with a manuscript name but was never described.